

REMARKS

Claims 1-12 are pending in this application. Claims 1-8, 10 and 11 have been amended. No new matter has been introduced. The amendment to claims 6 and 10 obviates the objection and rejection, respectively, of these claims.

Claims 1, 2 and 7-12 are rejected under 35 U.S.C. § 102(e) as being anticipated by Washington et al. (U.S. Patent No. 5,300,370) ("Washington"). This rejection is respectfully traversed.

The claimed invention relates to an interconnect device for a fuel cell, and corresponding fuel cell and fuel cell stack with such interconnect device. As such, amended independent claim 1 recites an interconnect device comprising "a channel system having a first plurality of channels, each channel being closed in one end and having either an inlet side or an outlet side at the open end of the channel, each channel having an inlet side placed in alternating order with a channel having an outlet side, the inlet side of each channel being placed in consecutive order on one side of the interconnect, and the outlet side of each channel being placed in consecutive order on the opposite side of the interconnect relative to the inlet side." Amended independent claim 1 also recites "a second plurality of channels located on the surface of the first plurality of channels of the channel system so that the second plurality of channels is in a plan which is about parallel to the first plurality of channels." Claims 9 and 12 are directed to a fuel cell and stack comprising the interconnect of claim 1.

Washington relates to a "laminated fluid flow field assembly for an electrochemical fuel cell" that comprises "a separator layer and a stencil layer." (Abstract). According to Washington, "[T]he separator layer is formed of electrically conductive,

substantially fluid impermeable sheet material” and the stencil layer “is formed of electrically conductive sheet material, and has a fluid inlet and at least one opening extending between its major surfaces and in fluid communication with the fluid inlet.” (Abstract).

Washington does not anticipate the subject matter of claims 1, 2 and 7-12. Washington is silent about “a first plurality of channels . . . each channel having an inlet side placed in alternating order with a channel having an outlet side, the inlet side of each channel being placed in consecutive order on one side of the interconnect, and the outlet side of each channel being placed in consecutive order on the opposite side of the interconnect relative to the inlet side” and “a second plurality of channels located on the surface of the first plurality of channels of the channel system so that the second plurality of channels is in a plan which is about parallel to the first plurality of channels,” as amended claim 1 recites. Washington is silent about first and second plurality of channels as part of an interconnect device, much less about first and second plurality of channels disposed in the specific arrangement recited in amended independent claim 1. For at least these reasons, Washington fails to anticipate the subject matter of claims 1, 2 and 7-12, and withdrawal of the rejection of these claims is respectfully requested.

Claims 1-3, 6 and 9 are rejected under 35 U.S.C. § 102(e) as being anticipated by Koseki (U.S. Patent No. 5,234,776). This rejection is respectfully traversed.

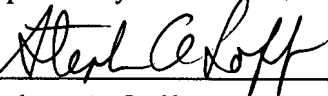
Koseki relates to a “fuel cell” that includes “ribs integrally formed with an anode or an anode chamber, ribs integrally formed with a cathode or cathode chamber, and a water distributor.” (Abstract).

Koseki does not disclose, teach or suggest a channel system having first and second plurality of channels disposed in the specific arrangement claimed in amended independent claim 1. Specifically, Koseki does not disclose "a first plurality of channels . . . each channel having an inlet side placed in alternating order with a channel having an outlet side, the inlet side of each channel being placed in consecutive order on one side of the interconnect, and the outlet side of each channel being placed in consecutive order on the opposite side of the interconnect relative to the inlet side" and further in communication with "a second plurality of channels . . . in a plan which is about parallel to the first plurality of channels," as in the claimed invention. Koseki teaches an embodiment with a ribbed anode 30B having horizontal and vertical grooves that form "many island-like isolated protrusions or ribs 32B" (col. 9, ll. 51-57), and not the limitations of the claimed invention. For at least these reasons, Koseki fails to anticipate the subject matter of claims 1-3, 6 and 9, and withdrawal of the rejection of these claims is respectfully requested.

Allowance of all pending claims is solicited.

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Respectfully submitted,

By 

Stephen A. Soffen

Registration No.: 31,063

Gabriela I. Coman

Registration No.: 50,515

DICKSTEIN SHAPIRO LLP

1825 Eye Street, NW

Washington, DC 20006-5403

(202) 420-2200

Attorneys for Applicants